**Problem Solving Scenarios**

1. The nuclear plant is wanting to expand the capacity of their system. There is land available right next to their plant. They want to add another reactor, but they need to make sure it is done safely and efficiently. What careers need to work together to help fix this problem, what is the order of events, and how do they solve this problem?
2. There has been a situation where an employee has noticed that a piece of equipment has started to malfunction. Since this is a nuclear plant, this can be a very serious matter. What careers need to work together to help fix this problem, what is the order of events, and how do they solve this problem?
3. Over the past several months there have been many complaints made to the city. Upstream from the nuclear power plant, there have been several sightings of large amounts of dead fish. What are the steps that need to be taken to make sure this is not being caused by the power plant itself? What careers need to work together to help fix this problem, what is the order of events, and how do they solve this problem?
4. The citizens of the town have made many complaints about air quality in the area. They are starting to question if the local plants are in compliance with the Clean Air Act. How do the citizens determine if this is actually the issue? What careers need to work together to help fix this problem, what is the order of events, and how do they solve this problem?
5. Every 18 months the nuclear power plant must have a refueling outage. Outages are very important to help the plant running smoothly. What would need to happen for the plant to have a smooth outage? What careers need to work together to help fix this problem, what is the order of events, and how do they solve this problem?
6. TVA wants to build a new nuclear plant in town. There seems to be plenty of land for this and it could make energy cheaper and cleaner for everyone. There are many steps that need to be taken before this can happen. What careers need to work together to help fix this problem, what is the order of events, and how do they solve this problem?
7. There is a dog park located up the street from the nuclear power plant. At this park, there is a creek that attaches to the river the power plant uses. This creek has become overgrown with an algal bloom. How can the citizens determine if this is caused by the power plant? What careers need to work together to help fix this problem, what is the order of events, and how do they solve this problem?